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FERTILIZER REPORT

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FOR THE YEAR

1943

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FERTILIZER REPORT 1943

INTRODUCTION

All products intended for fertilizing purposes, except the dung of domestic animals, marl, lime, and wood ashes, shall be registered annually in accordance with the provisions of the Pennsylvania Fertilizer Law, Act of May 1, 1909, as amended.

Section 1 requires the following information to be shown on sacks or attached cards: (a) The number of pounds of fertilizer contained in the package; (b) the name, brand, or trade mark under which the fertilizer is sold; (c) the name and principal address of the manufacturer, importer, or other person putting the fertilizer on the market in this Commonwealth; (d) guarantee for nitrogen; (e) guarantee for total phosphoric acid, except in mixed or superphosphate fertilizer; (f) guarantee for available phosphoric acid; (g) guarantee for potash soluble in distilled water.

Mixed fertilizer shall contain at least sixteen units of plant food based upon guarantees for nitrogen, available phosphoric acid, and water soluble potash, the guarantees to be stated in even units.

Applications for registration are submitted to each previous licensee toward the close of the calendar year. The application must show the preceding year's tonnage sales of each brand in order that license or registration fee can be properly computed. It must also show the names and number of brands to be sold during the ensuing year, and state the analysis of each one of such brands.

Agents of the Bureau of Foods and Chemistry are empowered to collect samples of commercial fertilizers, at which time reports providing full information for each sample are prepared. The samples and reports are forwarded direct to the Harrisburg Laboratory where an immediate check of the record is effected to determine the registration status. Analyses are then performed to ascertain whether the fertilizers conform to their guarantees.

During the year 1943, Agents of the Department collected 482 official samples, and of this number, 479, representing 215 brands, registered by 47 manufacturers, were subjected to analysis and classified as follows:

	BRANDS	SAMPLES
Complete Fertilizers.....	124	298
Ground Bone Fertilizers.....	9	10
Superphosphate Fertilizers.....	34	86
Rock and Potash Fertilizers.....	44	81
Miscellaneous Fertilizers.....	<u>4</u>	<u>4</u>
Total	215	479

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REQUIREMENTS FOR REGISTRATION ACCORDING
TO PENNSYLVANIA FERTILIZER LAW

Section 2. Each manufacturer or importer of commercial fertilizer.... shall on or before the first day of January of each year, or before offering them for sale in this Commonwealth, file annually with the Secretary of Agriculture a Statement of the names and number of brands of such commercial fertilizers, having distinct trade-names, that he shall offer for sale during the next ensuing year, and a copy of the analysis of each one of such brands of commercial fertilizer....

Section 3. In addition.... every manufacturer or importer of commercial fertilizers shall, on or before the first day of January of each year, or before offering them for sale in this Commonwealth, file annually with the Secretary of Agriculture an affidavit showing the amount of each brand of fertilizer, having a distinct trade-name, sold within the Commonwealth during the last preceding year; and if the said amount shall be one hundred and fifty tons or less, he or they shall pay or cause to be paid to the Secretary of Agriculture the sum of fifteen dollars for each and every brand of such commercial fertilizer, having a distinct trade-name, sold within the State during the last preceding year; and if the said amount shall exceed one hundred and fifty tons, and be not more than two hundred and fifty tons, he or they shall pay the sum of twenty dollars, as aforesaid; if the said amount shall exceed two hundred and fifty tons, and not more than four hundred tons, he or they shall pay the sum of thirty dollars; if the amount shall exceed four hundred tons, and not more than five hundred tons, he or they shall pay forty dollars; and if the amount shall exceed five hundred tons, he or they shall pay fifty dollars. If such manufacturer or manufacturers, importer or importers, shall not have made any sales within the Commonwealth during the preceding year, he or they shall pay the sum of fifteen dollars upon each such brand as aforesaid. — Act of May 1, 1909, P. L. 344 as amended.

BRANDS REGISTERED AND TONNAGE SALES

Licenses were issued to 101 manufacturers to cover sales of their brands for the year 1943. These licenses included 730 brands of which 595 were mixed fertilizers and 135 so-called "base" materials such as nitrate of soda, sulphate of ammonia, bone, etc.

The 1943 applications for registration showed that 378,733 tons of all classes of fertilizers were sold during the year 1942, (compared with 375,595 tons sold during 1941) and classified as follows: Complete Fertilizers, 219,627 tons; Ground Bone Fertilizers, 1,672 tons; Superphosphate Fertilizers, 78,888 tons; Lime Phosphate Fertilizers, 18 tons; Rock and Potash Fertilizers, 74,078 tons; and Miscellaneous Fertilizers including the following: Tankage 1,189 tons; Nitrate of Soda, 470 tons; Potash Salts, 633 tons; Sulphate of Ammonia, 375 tons; and unclassified 1,783 tons.

The 1942 tonnage figure reveals that there were supplied 8,029 tons of nitrogen, 50,084 tons of available phosphoric acid, and 21,722 tons of water soluble potash, or a total of 79,835 tons of plant food. The amount of plant food is in excess of that supplied during the year 1941 namely, 76,832 tons.

CONCLUSIONS

Of the 479 official samples analyzed, 26 or 5.42% were found to be deficient in one or more elements of plant food, to the extent of .2% or more. The proportion of deficiencies is higher than that reported for the year 1942.

Considering the plant food elements separately, 9 samples or 1.88% were found to be deficient in nitrogen, 2 or 0.42% deficient in phosphoric acid, and 65 or 3.11% deficient in water soluble potash.

Of the total number of fertilizers analyzed, 298 were complete fertilizers and 22 or 7.38% were found to be deficient, 9 or 3.02% deficient in nitrogen, 1 or 0.33% in available phosphoric acid, 12 or 4.03% in water soluble potash.

The Law requires that when the word "tobacco" is used as a part of the brand name, the potash content must be in a form other than chloride.

The average unit values, estimated from the average retail selling prices, were as follows: Nitrogen \$3.68, Available Phosphoric Acid \$1.13, Water Soluble Potash \$1.59.

The average retail selling price for Complete Fertilizers was \$36.20 per ton, compared with \$34.44 for 1942.

It is noted that 5.42% of all samples collected during the year 1943 were found to be deficient, which deficiency is higher than the previous year's inspection. In most instances the deficiencies were balanced by overages in other elements. Where the deficiencies were found to be of a serious nature, prosecution was instituted.

TABLE I. DEFICIENCIES

CLASS OF FERTILIZERS	SAMPLES	<u>Number Deficient in</u>		
		NITROGEN	AVAILABLE PHOSPHORIC ACID	POTASH
Complete Fertilizers.....	298	9	1	12
Ground Bone Fertilizers.....	10	-	-	--
Superphosphate Fertilizers...	86	-	1	--
Rock and Potash Fertilizers...	81	-	-	3
Miscellaneous Fertilizers....	<u>4</u>	<u>-</u>	<u>-</u>	<u>--</u>
TOTAL	479	9	2	15

TABLE II. AVERAGE ANALYSES AND RETAIL PRICES

FORM OF PLANT FOOD	COMPLETE FERTILIZERS	GROUND BONE FERTI- LIZERS	SUPERPHOS- PHATE FERTI- LIZERS*	ROCK AND POTASH FERTI- LIZERS
	Per Cent	Per Cent	Per Cent	Per Cent
Nitrogen.....	3.16	3.36	----	----
Total Phosphoric Acid.....	----	22.29	----	----
Available Phosphoric Acid.	12.40	----	21.77	15.16
Potash.....	6.65	----	----	8.83
Selling Price 1943.....	\$36.20	\$53.20	\$24.57	\$31.14
Selling Price 1942.....	\$34.44	\$54.51	\$23.61	\$30.41

Excluding Lime Phosphate

KEY TO TABLES

The following tables include the results of chemical analyses of the official samples. Each sample was given a chemist's number and analyzed for the element or elements guaranteed.

The Asterisk (*) indicates those samples found to be deficient to the extent of .2% or more.

Table III, Complete Fertilizers, furnishing Nitrogen, Available Phosphoric Acid, and Potash.

Table IV, Ground Bone Fertilizers, furnishing Nitrogen and Total Phosphoric Acid.

Table V, Superphosphate and Lime Phosphate Fertilizers, furnishing Available Phosphoric Acid.

Table VI, Rock and Potash Fertilizers, furnishing Available Phosphoric Acid and Potash.

Table VII, Miscellaneous Fertilizers, including Nitrate of Soda, and Muriate of Potash.

WARNING

Section 5. Any person or persons selling, offering, or exposing for sale, any commercial fertilizer or any brand of the same, having a distinct trade-name, without the analysis required by section one of this act, or with an analysis stating that it contains a larger percentage of any one or more of the above-named constituents than is contained therein, or for the sale of which all the provisions of sections two and three have not been complied with, or any person violating any of the provisions of section four of this act, shall be guilty of a misdemeanor, and, on conviction, shall be sentenced to pay a fine of not less than twenty-five nor more than one hundred dollars for the first offense, and not less than two hundred dollars for each subsequent offence.... - Act of May 1, 1909, P. L. 344 as amended.

The Department of Agriculture, as the agency charged by the Legislature with the enforcement of the provisions of the Fertilizer Law, copies of which are available upon request, insists upon strict compliance therewith.

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME		NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
		Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
		P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
THE ACME GUANO CO. Baltimore, Md.								
Acme Fertilizer	2-12-6 (212)	2.82	2.00	12.86	12.00	6.42	6.00	---
THE AMERICAN AGRICULTURAL CHEMICAL CO. New York, N. Y.								
AA Horse Shos Fertilizer	2-12-6 (365)	2.05	2.00	13.84	12.00	6.38	6.00	---
AA Horse Shoe Fertilizer	2-12-6 (86)	2.00	2.00	12.73	12.00	6.45	6.00	---
AA Horse Shoe Fertilizer	2-12-6 (57)	1.90	2.00	12.37	12.00	6.23	6.00	---
AA Climax Fertilizer	3-12-6 (262)	2.96	3.00	13.90	12.00	6.69	6.00	---
AA Climax Fertilizer	3-12-6 (85)	3.01	3.00	12.68	12.00	6.63	6.00	---
AA Red Seal Fertilizer	4-10-5 (325)	3.98	4.00	11.16	10.00	5.29	5.00	---
AA Pathfinder	4-12-4 (429)	4.10	4.00	12.20	12.00	4.22	4.00	---
Agrico	3-12-6 (161)	3.06	3.00	13.68	12.00	6.49	6.00	---
Agrico for Corn	3-12-6 (28)	2.87	3.00	12.47	12.00	6.14	6.00	---
Agrico for Corn	3-12-6 (266)	3.02	3.00	13.34	12.00	6.53	6.00	---
Agrico for Corn	3-12-6 (327)	2.86	3.00	12.42	12.00	6.08	6.00	---
Agrico for Corn	3-12-6 (427)	3.05	3.00	12.68	12.00	6.20	6.00	---
Agrico for Corn	3-12-6 (477)	3.25	3.00	13.36	12.00	6.14	6.00	---
Agrico for Grain	2-12-6 (89)	1.98	2.00	12.00	12.00	6.71	6.00	---
Agrico for Grain	2-12-6 (265)	2.06	2.00	12.30	12.00	6.39	6.00	---
Agrico for Grain	2-12-6 (338)	2.28	2.00	13.38	12.00	5.94	6.00	---
Agrico for Grain	2-12-6 (380)	1.92	2.00	12.78	12.00	6.32	6.00	---
Agrico for Grain	2-12-6 (426)	2.12	2.00	13.32	12.00	6.40	6.00	---
Agrico for Lawns, Trees & Shrubs	3-10-5 (340)	2.88	3.00	10.23	10.00	5.91	5.00	---
Agrico for Potatoes	4- 8-8 (345)	3.98	4.00	8.77	8.00	8.53	8.00	---
Agrico for Potatoes	4-10-10 (29)	3.83	4.00	10.97	10.00	10.54	10.00	---
Agrico for Potatoes	4-10-10 (343)	3.85	4.00	11.72	10.00	*9.69	10.00	---
Agrico for Top Dressing	7- 7-7 (87)	7.08	7.00	7.76	7.00	6.90	7.00	---
Agrico for Truck	4-10-5 (165)	4.07	4.00	10.94	10.00	5.70	5.00	---
Agrico for Truck	4-10-5 (348)	3.99	4.00	11.21	10.00	5.33	5.00	---
Agrico for Truck	4-10-10 (267)	4.00	4.00	11.20	10.00	10.13	10.00	---
Agrico for Truck	4-12-4 (31)	3.80	4.00	12.85	12.00	4.15	4.00	---
Agrico for Victory Garden	3- 8-7 (342)	3.10	3.00	7.93	8.00	7.10	7.00	---
Agrico Victory Garden Fertilizer	3- 8-7 (58)	3.06	3.00	8.66	8.00	7.43	7.00	---
Agrico for Wheat	2-12-6 (160)	2.13	2.00	14.18	12.00	6.52	6.00	---
Agrico for Wheat	2-12-6 (183)	2.03	2.00	12.98	12.00	6.47	6.00	---
Agrico for Wheat	2-12-6 (323)	1.97	2.00	12.36	12.00	6.58	6.00	---
Agrico for Wheat	2-12-6 (339)	2.38	2.00	13.18	12.00	6.12	6.00	---
ARMOUR FERTILIZER WORKS Baltimore, Md.								
Armour's Big Crop Fertilizer	2-12-6 (33)	2.00	2.00	13.19	12.00	6.30	6.00	---
Armour's Big Crop Fertilizer	2-12-6 (84)	1.99	2.00	12.18	12.00	6.72	6.00	---
Armour's Big Crop Fertilizer	2-12-6 (147)	2.00	2.00	12.96	12.00	6.37	6.00	---
Armour's Big Crop Fertilizer	2-12-6 (175)	1.88	2.00	12.70	12.00	5.85	6.00	---
Armour's Big Crop Fertilizer	2-12-6 (222)	2.45	2.00	13.04	12.00	6.93	6.00	---
Armour's Big Crop Fertilizer	2-12-6 (290)	2.06	2.00	12.60	12.00	6.86	6.00	---
Armour's Big Crop Fertilizer	2-12-6 (482)	2.00	2.00	12.34	12.00	6.46	6.00	---
Armour's Big Crop Fertilizer	3-12-6 (36)	2.83	3.00	12.60	12.00	6.46	6.00	---
Armour's Big Crop Fertilizer	3-12-6 (83)	3.02	3.00	12.28	12.00	6.55	6.00	---
Armour's Big Crop Fertilizer	3-12-6 (130)	2.96	3.00	12.92	12.00	6.41	6.00	---
Armour's Big Crop Fertilizer	2-12-6 (223)	2.07	2.00	13.00	12.00	6.63	6.00	---
Armour's Big Crop Fertilizer	3-12-6 (291)	3.00	3.00	13.42	12.00	6.59	6.00	---
Armour's Big Crop Fertilizer	3-12-6 (349)	3.05	3.00	12.52	12.00	6.74	6.00	---
Armour's Big Crop Fertilizer	3-12-6 (381)	2.96	3.00	12.68	12.00	6.26	6.00	---
Armour's Big Crop Fertilizer	3-12-6 (441)	3.07	3.00	13.42	12.00	5.92	6.00	---
Armour's Big Crop Fertilizer	3-12-6 (454)	2.87	3.00	13.62	12.00	*5.48	6.00	---
Armour's Big Crop Fertilizer	4-10-10 (34)	3.98	4.00	10.79	10.00	10.62	10.00	---
Armour's Big Crop Fertilizer	4-10-10 (382)	3.90	4.00	11.40	10.00	10.14	10.00	---
Armour's Big Crop Fertilizer	4-10-10 (442)	3.96	4.00	10.83	10.00	9.91	10.00	---
Armour's Big Crop Fertilizer	4-12-4 (148)	3.99	4.00	11.86	12.00	4.30	4.00	---
Armour's Victory Garden	4-16-4 (443)	3.84	4.00	17.54	16.00	*3.62	4.00	---
Armour's Victory Garden	3- 8-7 (32)	2.97	3.00	9.70	8.00	6.96	7.00	---
Armour's Victory Garden	3- 8-7 (473)	3.04	3.00	9.13	8.00	7.64	7.00	---
BAUGH & SONS CO. Philadelphia, Pa.								
Baugh's	4-10-10 (59)	4.17	4.00	10.58	10.00	10.62	10.00	---
Baugh's	10- 6-4 (65)	9.81	10.00	6.56	6.00	4.66	4.00	---
Baugh's Balanced Plant Food	4-12-4 (393)	4.30	4.00	13.16	12.00	4.15	4.00	---

*Deficient

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME			NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
			Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
			P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
Baugh's Commercial Crop Compound	2-8-10 (145)		2.01	2.00	9.20	8.00	10.97	10.00	---
Baugh's Commercial Crop Compound	2-8-10 (306)		1.97	2.00	9.44	8.00	10.77	10.00	---
Baugh's Double Eagle Phosphata	2-12-6 (68)		2.14	2.00	12.57	12.00	6.88	6.00	---
Baugh's Double Eagle Phosphate	2-12-6 (110)		1.94	2.00	12.10	12.00	6.21	6.00	---
Baugh's Double Eagle Phosphata	2-12-6 (143)		2.06	2.00	11.94	12.00	6.45	6.00	---
Baugh's Double Eagle Phosphate	2-12-6 (226)		2.04	2.00	13.04	12.00	7.50	6.00	---
Baugh's Double Eagle Phosphata	2-12-6 (354)		2.20	2.00	13.72	12.00	6.91	6.00	---
Baugh's Double Eagle Phosphate	2-12-6 (392)		2.27	2.00	13.28	12.00	6.28	6.00	---
Baugh's Double Eagle Phosphate	2-12-6 (474)		2.09	2.00	13.18	12.00	6.12	6.00	---
Baugh's Double Power Fertilizer	4-16-4 (61)		4.01	4.00	17.60	16.00	4.57	4.00	---
Baugh's Perfection Brand	3-12-6 (157)		3.07	3.00	13.26	12.00	6.95	6.00	---
Baugh's Perfection Brand	3-12-6 (60)		3.30	3.00	12.67	12.00	6.22	6.00	---
Baugh's Perfection Brand	3-12-6 (227)		3.03	3.00	13.60	12.00	6.13	6.00	---
Baugh's Perfection Brand	3-12-6 (304)		3.17	3.00	13.02	12.00	6.53	6.00	---
Baugh's Perfection Brand	3-12-6 (353)		3.15	3.00	13.40	12.00	6.49	6.00	---
Baugh's Perfection Brand	3-12-6 (395)		3.21	3.00	13.38	12.00	6.48	6.00	---
Baugh's Perfection Brand	3-12-6 (468)		3.18	3.00	13.12	12.00	6.82	6.00	---
Baugh's Premium Plant Food & Soil Builder	2-12-6 (383)		2.24	2.00	13.42	12.00	6.05	6.00	---
Baugh's Premium Plant Food & Soil Builder	3-12-6 (109)		3.02	3.00	12.10	12.00	6.84	6.00	---
Baugh's Premium Plant Food & Soil Builder	3-12-6 (144)		3.02	3.00	12.08	12.00	6.22	6.00	---
Baugh's Premium Plant Food & Soil Builder	3-12-6 (224)		2.82	3.00	13.14	12.00	6.49	6.00	---
Baugh's Premium Plant Food & Soil Builder	3-12-6 (310)		3.03	3.00	12.94	12.00	6.39	6.00	---
Baugh's Premium Plant Food & Soil Builder	3-12-6 (355)		3.13	3.00	12.26	12.00	6.75	6.00	---
Baugh's Premium Plant Food & Soil Builder	3-12-6 (384)		2.85	3.00	13.26	12.00	6.18	6.00	---
Baugh's Premium Plant Food & Soil Builder	3-12-6 (394)		3.21	3.00	13.68	12.00	6.21	6.00	---
Baugh's Premium Plant Food & Soil Builder	4-10-5 (470)		3.81	4.00	12.06	10.00	5.74	5.00	---
Baugh's Premium Plant Food & Soil Builder	4-10-10 (309)		4.03	4.00	10.78	10.00	10.93	10.00	---
Baugh's Victory Garden Fertilizer	3-8-7 (64)		2.96	3.00	8.56	8.00	7.72	7.00	---
CARLISLE FERTILIZER WORKS Carlisle, Pa.									
Carlisle Brand Fertilizer	2-12-6 (133)		2.32	2.00	12.60	12.00	6.86	6.00	---
Carlisle Brand Fertilizer	3-12-6 (132)		3.20	3.00	13.72	12.00	6.40	6.00	---
CENTRAL CHEMICAL CORPORATION Hagerstown, Md.									
Farmrite Famous Fruit Food	10-6-4 (75)		*9.64	10.00	6.54	6.00	4.47	4.00	---
Farmrite Famous Gardenwritte Plant Food	3-8-7 (25)		3.88	3.00	8.31	8.00	7.69	7.00	---
Farmrite Famous Old Fish Brand	2-12-6 (92)		2.00	2.00	12.58	12.00	6.47	6.00	---
Farmrite Famous Favorite	4-12-4 (95)		3.91	4.00	12.22	12.00	5.18	4.00	---
Farmrite Famous Favorita	4-12-4 (168)		4.26	4.00	11.94	12.00	6.67	4.00	---
Farmrite Favorita Fertilizer	4-12-4 (359)		3.95	4.00	12.30	12.00	4.45	4.00	---
Farmrite Fertilizer	2-12-6 (76)		2.26	2.00	12.75	12.00	6.86	6.00	---
Farmrite Fertilizer	2-12-6 (90)		2.01	2.00	14.04	12.00	6.38	6.00	---
Farmrite Fertilizer	2-12-6 (124)		1.92	2.00	12.90	12.00	*5.60	6.00	---
Farmrite Fertilizer	2-12-6 (151)		2.17	2.00	12.69	12.00	6.21	6.00	---
Farmrite Fertilizer	2-12-6 (167)		2.95	2.00	11.92	12.00	7.41	6.00	---
Farmrite Fertilizer	2-12-6 (390)		2.03	2.00	13.60	12.00	6.05	6.00	---
Farmrite Fertilizer	4-10-10 (22)		3.92	4.00	10.36	10.00	10.84	10.00	---
Farmrite Fertilizer	4-12-8 (26)		3.93	4.00	12.68	12.00	7.93	8.00	---
Farmrite Fertilizer	4-12-8 (53)		4.10	4.00	12.30	12.00	8.76	8.00	---
Farmrite Golden Grain Fertilizer	3-12-6 (23)		2.85	3.00	13.36	12.00	6.62	6.00	---
Farmrite Golden Grain	3-12-6 (93)		2.90	3.00	12.05	12.00	6.51	6.00	---
Farmrite Golden Grain	3-12-6 (96)		3.01	3.00	12.52	12.00	6.50	6.00	---
Farmrite Golden Grain	3-12-6 (123)		3.00	3.00	12.26	12.00	6.20	6.00	---
Farmrite Golden Grain	3-12-6 (152)		3.11	3.00	13.28	12.00	7.18	6.00	---
Farmrite Golden Grain	3-12-6 (166)		3.06	3.00	11.94	12.00	8.12	6.00	---
Farmrite Golden Grain	3-12-6 (389)		3.20	3.00	13.48	12.00	6.11	6.00	---
Farmrite Golden Grain	3-12-6 (446)		2.98	3.00	12.72	12.00	6.12	6.00	---
Farmrite Golden Grain	3-12-6 (447)		2.90	3.00	13.58	12.00	6.07	6.00	---
Farmrite Imperial	2-8-10 (74)		2.02	2.00	8.63	8.00	10.99	10.00	---
Farmrite Super Special	4-16-4 (94)		3.98	4.00	16.76	16.00	*3.84	4.00	---
COOPERATIVE G.L.F. SOIL BUILDING SERVICE INC. Ithaca, New York									
G. L. F.	3-12-6 (460)		3.07	3.00	13.10	12.00	6.44	6.00	---
G. L. F.	4-10-10 (475)		4.09	4.00	10.35	10.00	11.22	10.00	---
G. L. F. Quality	4-12-4 (434)		4.10	4.00	12.92	12.00	5.49	4.00	---
G. L. F.	4-16-4 (476)		4.05	4.00	16.36	16.00	5.13	4.00	---

*Deficient

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		~AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
CUMBERLAND VALLEY COOPERATIVE ASSOCIATION Shippensburg, Pa.							
Old Reliable Fertilizer 3-12-6 (215)	3.67	3.00	13.42	12.00	8.46	6.00	---
THE DAVIDSON CHEMICAL CORPORATION Baltimore, Md.							
Davco Granulated 2-12-6 (8)	2.15	2.00	12.97	12.00	6.45	6.00	---
Davco Granulated 2-12-6 (185)	1.94	2.00	12.60	12.00	6.88	6.00	---
Davco Granulated 2-12-6 (194)	2.11	2.00	13.44	12.00	5.89	6.00	---
Davco Granulated 2-12-6 (229)	2.07	2.00	13.16	12.00	6.23	6.00	---
Davco Granulated 2-12-6 (280)	1.67	2.00	13.28	12.00	6.24	6.00	---
Davco Granulated 2-12-6 (334)	1.91	2.00	12.96	12.00	*5.28	6.00	---
Davco Granulated 2-12-6 (351)	1.92	2.00	11.88	12.00	6.55	6.00	---
Davco Granulated 2-12-6 (369)	1.98	2.00	12.80	12.00	5.87	6.00	---
Davco Granulated 3-12-6 (9)	3.24	3.00	12.53	12.00	5.74	6.00	---
Davco Granulated 3-12-6 (186)	2.93	3.00	13.16	12.00	6.63	6.00	---
Davco Granulated 3-12-6 (200)	3.07	3.00	12.86	12.00	6.72	6.00	---
Davco Granulated 3-12-6 (228)	3.06	3.00	13.28	12.00	6.24	6.00	---
Davco Granulated 3-12-6 (281)	3.00	3.00	13.00	12.00	6.71	6.00	---
Davco Granulated 3-12-6 (330)	3.28	3.00	12.24	12.00	6.61	6.00	---
Davco Granulated 3-12-6 (368)	2.81	3.00	12.30	12.00	6.02	6.00	---
Davco Granulated 4-12-4 (13)	4.07	4.00	12.84	12.00	5.05	4.00	---
Davco Granulated 4-12-4 (187)	3.94	4.00	12.36	12.00	4.83	4.00	---
Davco Granulated 4-12-4 (199)	4.23	4.00	13.16	12.00	4.50	4.00	---
Davco Granulated 4-12-4 (335)	4.02	4.00	12.80	12.00	5.17	4.00	---
Davco Granulated 4-12-8 (189)	3.85	4.00	13.06	12.00	8.39	8.00	---
Davco Granulated 4-10-10 (317)	3.83	4.00	10.20	10.00	11.27	10.00	---
Davco Granulated 6-15-15 (77)	5.98	6.00	15.18	15.00	15.65	15.00	---
Davco Granulated 6-15-15 (78)	6.02	6.00	15.24	15.00	15.54	15.00	---
Davco Granulated 6-15-15 (79)	6.08	6.00	15.80	15.00	15.57	15.00	---
Davco Granulated Pomo Food 10-6-4 (331)	*9.18	10.00	7.94	6.00	5.35	4.00	---
Davco Granulated Tomato Food 4-12-6 (333)	4.03	4.00	13.38	12.00	6.66	6.00	---
Davco Granulated Victory Garden Fertilizer 3-8-7 (12)	3.01	3.00	8.54	8.00	7.55	7.00	---
Davco Granulated Victory Garden Fertilizer 3-8-7 (188)	2.81	3.00	8.46	8.00	8.34	7.00	---
Davco Granulated Victory Garden Fertilizer 3-8-7 (332)	2.82	3.00	9.58	8.00	7.46	7.00	---
EASTERN STATES FARMERS' EXCHANGE West Springfield, Mass.							
Eastern States 3-12-6 (315)	3.53	3.00	13.54	12.00	6.71	6.00	---
Eastern States 3-12-6 (362)	3.15	3.00	13.56	12.00	6.51	6.00	---
Eastern States 3-12-6 (377)	3.19	3.00	13.14	12.00	6.41	6.00	---
Eastern States 3-12-6 (421)	3.12	3.00	13.56	12.00	5.83	6.00	---
Eastern States 4-24-12 (378)	4.05	4.00	25.04	24.00	12.05	12.00	---
Eastern States 5-10-10 (182)	4.92	5.00	10.70	10.00	10.88	10.00	---
Eastern States 5-10-10 (361)	5.13	5.00	11.08	10.00	10.67	10.00	---
Eastern States 5-15-5 (178)	5.12	5.00	17.32	15.00	5.91	5.00	---
ERIE REDUCTION COMPANY Erie, Pa.							
Erie All Crop 3-12-6 (440)	2.90	3.00	13.46	12.00	6.55	6.00	---
Erie Plant Food 4-12-4 (439)	4.54	4.00	12.32	12.00	4.13	4.00	---
FARMERS FERTILIZER WORKS Elizabethtown, Pa.							
Farmers 2-8-10 (241)	2.10	2.00	8.58	8.00	12.65	10.00	---
Farmers 2-12-6 (243)	2.26	2.00	13.06	12.00	7.54	6.00	---
Farmers 3-12-6 (244)	3.09	3.00	13.14	12.00	6.71	6.00	---
Farmers 4-12-4 (242)	4.22	4.00	13.58	12.00	7.42	4.00	---
GRIFFITH & BOYD CO. Baltimore, Md.							
Griffith & Boyd's High Grade Truck Guano 4-12-8 (52)	4.17	4.00	12.67	12.00	9.20	8.00	---
Griffith & Boyd's Planters Pride 3-12-6 (375)	2.91	3.00	13.10	12.00	7.15	6.00	---
Griffith & Boyd's Special Fish Guano 3-12-6 (55)	2.88	3.00	12.63	12.00	7.56	6.00	---
Griffith & Boyd's Wheat Grain Special 2-12-6 (150)	1.97	2.00	12.48	12.00	6.82	6.00	---
Griffith & Boyd's Wheat Grain Special 2-12-6 (374)	2.11	2.00	13.10	12.00	6.71	6.00	---
JACOB W. HOFFMAN, ESTATE Raubsville, Pa.							
Hoffman Special Truck 2-8-10 (278)	*1.74	2.00	9.36	8.00	*9.50	10.00	---
Victory Garden Fertilizer 3-8-7 (279)	*2.56	3.00	8.16	8.00	8.34	7.00	---
INDEPENDENT MANUFACTURING CO. Philadelphia, Pa.							
Consumer 2-12-6 (404)	2.07	2.00	12.88	12.00	6.97	6.00	---
Consumer 3-12-6 (401)	3.29	3.00	12.48	12.00	6.27	6.00	---
Consumer 4-12-4 (407)	4.51	4.00	12.34	12.00	5.16	4.00	---
Consumer 5-10-5 (403)	5.11	5.00	10.77	10.00	5.52	5.00	---
Consumer 10-6-4 (402)	*6.70	10.00	10.56	6.00	5.07	4.00	---
INTERNATIONAL MINERALS & CHEMICAL CORP. Buffalo, New York							
International 3-12-6 (436)	3.05	3.00	13.44	12.00	6.61	6.00	---

*Deficient

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME			NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
			Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
			P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
LANCASTER BONE FERTILIZER CO., INC. Quarryville, Pa.									
Conestoga	3-12-6	(232)	2.91	3.00	13.66	12.00	5.90	6.00	---
Conestoga	3-12-6	(237)	2.97	3.00	13.54	12.00	*5.62	6.00	---
Conestoga	3-12-6	(255)	3.17	3.00	13.20	12.00	*4.81	6.00	---
Conestoga	4-12-4	(240)	4.51	4.00	13.48	12.00	*3.64	4.00	---
Conestoga	4-12-4	(254)	*3.17	4.00	13.48	12.00	3.92	4.00	---
Conestoga Grain Special	2-12-6	(231)	2.25	2.00	13.28	12.00	5.90	6.00	---
Conestoga Grain Special	2-12-6	(238)	2.87	2.00	13.74	12.00	6.20	6.00	---
Conestoga Grain Special	2-12-6	(256)	2.07	2.00	13.60	12.00	5.81	6.00	---
Conestoga Grain Special	2-12-6	(360)	2.05	2.00	12.96	12.00	*5.34	6.00	---
LEBANON FERTILIZER WORKS Lebanon, Pa.									
Levan's	2-12-6	(119)	1.97	2.00	12.48	12.00	*5.61	6.00	---
Lavan's	2-12-6	(159)	1.98	2.00	12.12	12.00	5.95	6.00	---
Lavan's	3-12-6	(121)	3.17	3.00	12.04	12.00	5.99	6.00	---
Lavan's	4-12-4	(118)	3.99	4.00	11.84	12.00	4.24	4.00	---
FRED E. LORD, INC. Espy, Pa.									
Lord's	2-12-6	(140)	1.98	2.00	12.30	12.00	7.83	6.00	---
Lord's	3-12-6	(138)	2.96	3.00	12.32	12.00	6.61	6.00	---
Lord's	5-10-5	(141)	5.06	5.00	10.54	10.00	5.93	5.00	---
THE FREDERICK MEHRING FERTILIZER WORKS, INC. Keymar, Md.									
Indian Chief Mehrling	2-12-6	(193)	1.93	2.00	12.74	12.00	6.25	6.00	---
MILLER CHEMICAL & FERTILIZER CORP. Baltimore, Md.									
Rich Yield	2-12-6	(5)	2.33	2.00	12.16	12.00	6.86	6.00	---
Rich Yield	2-12-6	(111)	2.24	2.00	11.92	12.00	7.13	6.00	---
Rich Yield	2-12-6	(292)	2.15	2.00	12.42	12.00	6.56	6.00	---
Rich Yield	3-12-6	(6)	3.13	3.00	12.46	12.00	6.53	6.00	---
Rich Yield	3-12-6	(112)	3.21	3.00	11.98	12.00	7.08	6.00	---
Rich Yield	4-12-4	(7)	3.98	4.00	12.44	12.00	4.32	4.00	---
Victory Garden Fertilizer	3-8-7	(4)	2.99	3.00	8.06	8.00	8.14	7.00	---
ORGANIC PLANT FOOD CORP. Lancaster, Pa.									
Master Farmer	2-12-6	(253)	2.41	2.00	13.20	12.00	6.71	6.00	---
PENNSYLVANIA FARM BUREAU CO-OPERATIVE ASS'N. Harrisburg, Pa.									
C. F. S.	2-12-6	(71)	2.19	2.00	11.99	12.00	6.91	6.00	---
C. F. S.	2-12-6	(173)	1.89	2.00	13.24	12.00	6.16	6.00	---
C. F. S.	2-12-6	(209)	2.10	2.00	12.78	12.00	6.10	6.00	---
C. F. S.	2-12-6	(275)	2.03	2.00	13.20	12.00	6.14	6.00	---
C. F. S.	2-12-6	(367)	2.11	2.00	13.12	12.00	6.14	6.00	---
C. F. S.	2-12-6	(451)	2.21	2.00	13.02	12.00	6.33	6.00	---
C. F. S.	3-12-6	(174)	3.26	3.00	13.02	12.00	6.54	6.00	---
C. F. S.	3-12-6	(207)	3.14	3.00	13.62	12.00	6.30	6.00	---
C. F. S.	3-12-6	(276)	3.21	3.00	13.60	12.00	5.84	6.00	---
C. F. S.	3-12-6	(453)	3.24	3.00	13.00	12.00	6.49	6.00	---
C. F. S.	4-12-4	(171)	3.83	4.00	13.12	12.00	4.23	4.00	---
C. F. S.	4-12-4	(211)	3.82	4.00	12.96	12.00	4.48	4.00	---
C. F. S.	4-12-4	(366)	3.90	4.00	12.54	12.00	4.84	4.00	---
C. F. S.	4-12-4	(450)	4.15	4.00	13.22	12.00	4.24	4.00	---
C. F. S. Fruit Tree Special	10-6-4	(72)	9.84	10.00	6.75	6.00	4.55	4.00	---
READING BONE FERTILIZER COMPANY Reading, Pa.									
Reading All Crop Special	2-12-6	(155)	2.09	2.00	13.62	12.00	*5.33	6.00	---
Reading All Crop Special	2-12-6	(206)	2.14	2.00	13.40	12.00	*5.59	6.00	---
Reading All Crop Special	2-12-6	(249)	2.34	2.00	13.48	12.00	*4.66	6.00	---
Reading All Crop Special	2-12-6	(294)	2.56	2.00	13.38	12.00	*3.99	6.00	---
Reading	3-12-6	(156)	3.13	3.00	13.20	12.00	6.80	6.00	---
Reading	3-12-6	(205)	3.25	3.00	13.12	12.00	6.49	6.00	---
Reading	3-12-6	(248)	3.11	3.00	13.44	12.00	6.04	6.00	---
Reading	3-12-6	(293)	3.55	3.00	13.30	12.00	7.09	6.00	---
Reading	4-12-4	(247)	4.19	4.00	13.46	12.00	4.79	4.00	---
ROBERT A. REICHARD, INC. Allentown, Pa.									
Reichard's Animal Base	2-12-6	(274)	1.98	2.00	13.36	12.00	7.15	6.00	---
Reichard's Animal Base	3-12-6	(272)	*2.42	3.00	13.48	12.00	6.53	6.00	---
Reichard's Animal Base	4-12-4	(273)	3.81	4.00	12.80	12.00	4.57	4.00	---
F. S. ROYSTER GUANO CO. Baltimore, Md.									
Royster Banner Guano	2-8-10	(45)	2.16	2.00	8.71	8.00	10.91	10.00	---
Royster Hercules Guano	4-16-4	(43)	4.39	4.00	17.44	16.00	4.34	4.00	---
Royster Master Guano	2-12-6	(42)	1.84	2.00	12.66	12.00	6.04	6.00	---
Royster Master Guano	2-12-6	(100)	2.03	2.00	12.06	12.00	7.08	6.00	---
Royster Master Guano	2-12-6	(135)	1.98	2.00	12.38	12.00	6.61	6.00	---
Royster Prize Guano	4-10-10	(44)	3.83	4.00	10.68	10.00	10.28	10.00	---
Royster Prize Guano	4-10-10	(162)	4.03	4.00	10.92	10.00	10.72	10.00	---
*Deficient									

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME		NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
		Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
		P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
Royster Triumph Guano	3-12-6 (97)	3.02	3.00	12.85	12.00	6.28	6.00	---
Royster Triumph Guano	3-12-6 (39)	3.13	3.00	12.98	12.00	6.77	6.00	---
Royster Triumph Guano	3-12-6 (373)	3.22	3.00	13.58	12.00	6.45	6.00	---
Royster Victory Garden Fertilizer	3-8-7 (38)	3.17	3.00	9.18	8.00	7.20	7.00	---
SEIBERTS FERTILIZER Myerstown, Ps.								
Seiberts Fertilizer	2-12-6 (114)	2.42	2.00	14.04	12.00	6.91	6.00	---
Seiberts Fertilizer	3-12-6 (115)	3.30	3.00	12.50	12.00	6.83	6.00	---
M. L. SHOEMAKER & CO., INC. Philadelphia, Ps.								
Swift Sure	2-12-6 (409)	2.00	2.00	12.48	12.00	5.88	6.00	---
Swift Sure	3-12-6 (408)	2.88	3.00	12.78	12.00	6.74	6.00	---
SMITH AGRICULTURAL CHEMICAL CO. Columbus, Ohio								
Sscco	2-12-6 (456)	1.98	2.00	13.44	12.00	6.34	6.00	---
Sscco Victory Garden	3-8-7 (458)	3.25	3.00	8.90	8.00	7.67	7.00	---
SOMERSET COUNTY FERTILIZER WORKS, INC. Somerset, Pa.								
Beaver Brand	2-12-6 (387)	2.33	2.00	13.00	12.00	6.43	6.00	---
STANDARD WHOLESALE PHOSPHATE & ACID WORKS Baltimore, Md.								
Standards	4-10-10 (467)	3.87	4.00	10.07	10.00	10.42	10.00	---
SUMMERS FERTILIZER CO. Baltimore, Md.								
Summers Victory Garden Fertilizer	3-8-7 (70)	3.30	3.00	9.54	8.00	7.20	7.00	---
SWACK FERTILIZER CO. DuBois, Pa.								
Swack's	2-12-6 (415)	2.14	2.00	13.44	12.00	6.17	6.00	---
Swack's	3-12-6 (414)	3.01	3.00	12.52	12.00	6.34	6.00	---
Swack's	4-12-4 (416)	4.03	4.00	13.08	12.00	4.56	4.00	---
SWIFT & COMPANY FERTILIZER WORKS Baltimore, Md.								
Swift's Red Steer	2-8-10 (17)	1.99	2.00	9.01	8.00	*9.01	10.00	---
Swift's Red Steer	2-12-6 (101)	2.10	2.00	11.96	12.00	*5.64	6.00	---
Swift's Red Steer	2-12-6 (288)	2.15	2.00	12.72	12.00	6.54	6.00	---
Swift's Red Steer	2-12-6 (386)	2.34	2.00	12.52	12.00	6.86	6.00	---
Swift's Red Steer	3-12-6 (16)	3.12	3.00	13.30	12.00	6.06	6.00	---
Swift's Red Steer	3-12-6 (102)	2.97	3.00	12.12	12.00	6.22	6.00	---
Swift's Red Steer	3-12-6 (444)	3.20	3.00	13.70	12.00	6.94	6.00	---
Swift's Red Steer	4-10-10 (15)	4.03	4.00	10.83	10.00	10.16	10.00	---
Swift's Red Steer	4-10-10 (481)	3.91	4.00	10.18	10.00	10.62	10.00	---
Swift's Red Steer	4-12-4 (385)	4.30	4.00	13.04	12.00	4.68	4.00	---
Swift's Red Steer	4-12-4 (480)	4.24	4.00	12.44	12.00	4.92	4.00	---
Swift's Red Steer	4-16-4 (285)	*3.64	4.00	17.40	16.00	4.49	4.00	---
Swift's Red Steer	5-10-10 (289)	*4.64	5.00	11.76	10.00	9.84	10.00	---
Swift's Vigoro	4-12-4 (341)	3.94	4.00	13.18	12.00	4.81	4.00	---
Swift's Vigoro	4-12-4 (445)	4.24	4.00	13.60	12.00	4.63	4.00	---
Swift's Vigoro Victory Garden	3-8-7 (19)	3.11	3.00	8.53	8.00	7.00	7.00	---
Swift's Vigoro Victory Garden	3-8-7 (197)	3.27	3.00	9.28	8.00	7.12	7.00	---
I. P. THOMAS & SON COMPANY Camden, N. J.								
Champion Gusno	2-12-6 (299)	1.92	2.00	12.66	12.00	6.18	6.00	---
Champion Gusno	2-12-6 (463)	2.28	2.00	13.28	12.00	6.50	6.00	---
Soil Rich Victory Garden Fertilizer	3-8-7 (464)	3.47	3.00	8.57	8.00	7.13	7.00	---
Tip Top Fertilizer	3-12-6 (466)	3.04	3.00	12.76	12.00	6.74	6.00	---
TRENTON BONE FERTILIZER CO. Trenton, N. J.								
Trenton	3-12-6 (318)	3.26	3.00	13.42	12.00	7.61	6.00	---
F. W. TUNNELL & COMPANY INC. Philadelphia, Ps.								
Tunnell's Fertilizer	2-8-10 (295)	2.12	2.00	10.78	8.00	*8.23	10.00	---
Tunnell's Fertilizer	2-12-6 (69)	2.08	2.00	12.73	12.00	6.40	6.00	---
Tunnell's Fertilizer	2-12-6 (298)	1.81	2.00	12.90	12.00	6.48	6.00	---
Tunnell's Fertilizer	2-12-6 (396)	2.05	2.00	13.12	12.00	6.26	6.00	---
Tunnell's Fertilizer	3-12-6 (297)	2.80	3.00	13.34	12.00	6.33	6.00	---
Tunnell's Fertilizer	3-12-6 (398)	3.16	3.00	13.04	12.00	6.66	6.00	---
Tunnell's Fertilizer	4-10-5 (320)	4.12	4.00	10.21	10.00	5.30	5.00	---
Tunnell's Fertilizer	4-12-8 (296)	4.00	4.00	12.76	12.00	9.18	8.00	---

*Deficient

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME			NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
			Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
			P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
VIRGINIA-CAROLINA CHEMICAL CORP. Baltimore, Md.									
V-C Fertilizer	2-12-6 (104)		2.00	2.00	12.22	12.00	6.58	6.00	---
V-C Fertilizer	2-12-6 (176)		2.07	2.00	13.30	12.00	6.03	6.00	---
V-C Fertilizer	2-12-6 (300)		1.95	2.00	12.66	12.00	6.15	6.00	---
V-C Fertilizer	2-12-6 (370)		2.12	2.00	13.14	12.00	6.76	6.00	---
V-C Fertilizer	2-12-6 (433)		2.14	2.00	13.12	12.00	6.32	6.00	---
V-C Fertilizer	2-12-6 (461)		2.02	2.00	12.76	12.00	6.63	6.00	---
V-C Fertilizer	3-12-6 (105)		3.01	3.00	12.40	12.00	6.66	6.00	---
V-C Fertilizer	3-12-6 (158)		3.06	3.00	13.66	12.00	6.81	6.00	---
V-C Fertilizer	3-12-6 (307)		3.11	3.00	13.16	12.00	5.95	6.00	---
V-C Fertilizer	4-10-5 (50)		3.91	4.00	11.19	10.00	5.35	5.00	---
V-C Fertilizer	4-12-4 (177)		4.13	4.00	12.56	12.00	4.49	4.00	---
V-C Fertilizer	4-16-4 (48)		3.63	4.00	17.20	16.00	5.25	4.00	---
V-C Fertilizer	10-6-4 (73)		10.03	10.00	7.01	6.00	4.48	4.00	---
V-C Victory Garden Fertilizer	3-8-7 (47)		2.81	3.00	8.57	8.00	8.12	7.00	---
YORK CHEMICAL WORKS York, Pa.									
Dempwolf's	3-8-7 (270)		3.06	3.00	9.20	8.00	6.93	7.00	---
Dempwolf's General Crop	3-12-6 (418)		2.99	3.00	12.02	12.00	6.37	6.00	---
Average			3.16	----	12.40	----	6.65	----	---
*Deficient									

TABLE IV. GROUND BONE FERTILIZERS—FURNISHING NITROGEN AND PHOSPHORIC ACID

MANUFACTURER AND BRAND NAME	NITROGEN		PHOSPHORIC ACID	
	Found	Guar.	Found	Guar.
	P. ct.	P. ct.	P. ct.	P. ct.
AMERICAN AGRICULTURAL CHEMICAL CO. New York, N. Y.				
Bone Meal (346)	2.30	2.50	25.50	20.00
BAUGH & SONS COMPANY Philadelphia, Pa.				
Baugh's Pure Steamed Bone Meal (67)	3.11	2.47	23.60	23.00
Baugh's Pure Steamed Bone Meal (319)	3.44	2.47	23.70	23.00
Baugh's Raw Bone Meal (66)	4.15	3.70	21.20	20.50
FOX FERTILIZER Collingswood, N. J.				
Bone Meal (1)	*1.94	2.47	*11.30	23.00
F. S. ROYSTER GUANO COMPANY Baltimore, Md.				
Royster's Raw Bone Meal (201)	4.18	3.70	23.70	20.60
M. L. SHOEMAKER COMPANY Philadelphia, Pa.				
Swift Sure 3.70% Bone Meal (412)	3.90	3.70	22.20	20.00
SWIFT & COMPANY FERTILIZER WORKS Baltimore, Md.				
Raw Bone Meal Fertilizer (196)	4.40	3.70	23.20	20.00
P. W. TUNNELL & COMPANY INC. Philadelphia, Pa.				
Pure Ground Bone (322)	3.28	2.47	23.10	23.00
VIRGINIA-CAROLINA CHEMICAL CORP. Baltimore, Md.				
Fine Ground Bone (136)	2.85	2.47	25.30	23.00
Average	3.36	----	22.29	----

*Deficient

TABLE V. SUPERPHOSPHATE AND LIME PHOSPHATE FERTILIZERS—FURNISHING PHOSPHORIC ACID

300-4-40

MANUFACTURER AND BRAND NAME		PHOSPHORIC ACID					
		Total		Available		Insoluble	
		Found	Guar.	Found	Guar.	Found	Guar.
		P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
<u>SUPERPHOSPHATE FERTILIZER</u>							
THE ACME GUANO COMPANY Baltimore, Md.							
Acme 20% Superphosphate	(214)			21.24	20.00		
THE AMERICAN AGRICULTURAL CHEMICAL CO. New York, N. Y.							
18% Normal Superphosphate	(27)			19.92	18.00		
18% Normal Superphosphate	(113)			18.64	18.00		
18% Normal Superphosphate	(163)			20.14	18.00		
18% Normal Superphosphate	(184)			20.90	18.00		
18% Normal Superphosphate	(264)			20.46	18.00		
18% Normal Superphosphate	(364)			20.60	18.00		
18% Normal Superphosphate	(425)			21.06	18.00		
18% Normal Superphosphate	(478)			19.26	18.00		
18% Normal Superphosphate	(261)			22.46	20.00		
AA 20% Superphosphate	(324)			22.02	20.00		
ARMOUR FERTILIZER WORKS Baltimore, Md.							
Armour's Big Crop Superphosphate 20%	(37)			21.20	20.00		
Armour's Big Crop Superphosphate 20%	(81)			20.88	20.00		
Armour's Big Crop Superphosphate 20%	(146)			21.90	20.00		
Armour's Big Crop Superphosphate 20%	(221)			23.28	20.00		
Armour's Big Crop Superphosphate 20%	(350)			21.70	20.00		
BAUGH & SONS COMPANY Philadelphia, Pa.							
Baugh's 20% Superphosphate	(62)			21.34	20.00		
Baugh's 20% Superphosphate	(225)			22.98	20.00		
Baugh's 20% Superphosphate	(311)			22.10	20.00		
Baugh's 20% Superphosphate	(356)			21.48	20.00		
Baugh's 20% Superphosphate	(471)			20.92	20.00		
CARLISLE FERTILIZER WORKS Carlisle, Pa.							
Carlisle Brand 20% Superphosphate	(131)			20.18	20.00		
CENTRAL CHEMICAL CORPORATION Hagerstown, Md.							
Farmrite Superphosphate 20%	(24)			21.90	20.00		
Farmrite Superphosphate 20%	(91)			20.44	20.00		
Farmrite Superphosphate 20%	(125)			22.58	20.00		
Farmrite Superphosphate 20%	(154)			21.64	20.00		
Farmrite Superphosphate 20%	(170)			20.14	20.00		
COOPERATIVE FERTILIZERS INC. Binghamton, N. Y.							
C. F. O. Superphosphate 20%	(263)			21.70	20.00		
COOPERATIVE C.L.F. SOIL BUILDING SERVICE, INC. Ithaca, N. Y.							
C.L.F. Quality Gran-Phosphate 20%	(259)			22.40	20.00		
C.L.F. Quality Superphosphate 20%	(435)			21.94	20.00		
C.L.F. Superphosphate 20%	(459)			22.06	20.00		
C. V. COOPERATIVE ASSN. Shippensburg, Pa.							
Old Reliable 20% Superphosphate	(129)			*19.26	20.00		
Old Reliable 20% Superphosphate	(217)			21.38	20.00		
OAVISON CHEMICAL CORPORATION Baltimore, Md.							
Oavco Granulated 20% Superphosphate	(10)			21.96	20.00		
Oavco Granulated 20% Superphosphate	(252)			22.02	20.00		
Oavco Granulated 20% Superphosphate	(329)			21.64	20.00		
Oavco Granulated 20% Superphosphate	(352)			20.60	20.00		
Oavco Granulated 20% Superphosphate	(455)			21.30	20.00		
Oavco 20% Superphosphate	(195)			21.98	20.00		
Oavco 20% Superphosphate	(230)			22.90	20.00		
*Deficient							

TABLE V. SUPERPHOSPHATE AND LIME PHOSPHATE FERTILIZERS—FURNISHING PHOSPHORIC ACID

10-4-40

MANUFACTURER AND BRAND NAME		PHOSPHORIC ACID					
		Total		Available		Insoluble	
		Found P. ct.	Guar. P. ct.	Found P. ct.	Guar. P. ct.	Found P. ct.	Guar. P. ct.
EASTERN STATES FARMERS' EXCHANGE West Springfield, Mass.							
Eastern States 20% Superphosphate Grenuleted	(179)			22.02	20.00		
Eastern States 20% Superphosphate Grenuleted	(218)			21.98	20.00		
Eastern States 20% Superphosphate Grenuleted	(316)			22.10	20.00		
Eastern States 20% Superphosphate Grenuleted	(424)			21.32	20.00		
Eastern States 20% Superphosphate Pulverized	(181)			21.70	20.00		
Eastern States 20% Superphosphate Pulverized	(423)			21.12	20.00		
Eastern States 20% Superphosphate Pulverized	(430)			21.58	20.00		
Eastern States 24% Superphosphate	(376)			25.00	24.00		
FARMERS FERTILIZER WORKS Elizabethtown, Pa.							
Farmers Superphosphate 20%	(245)			22.72	20.00		
GRIFFITH & BOYD COMPANY Baltimore, Md.							
Griffith & Boyd Special 20% Superphosphate	(437)			21.40	20.00		
INDEPENDENT MANUFACTURING CO. Philadelphia, Pa.							
Independent's Consumer 20% Superphosphate	(406)			20.48	20.00		
LANCASTER BONE FERTILIZER CO., INC. Quarryville, Pa.							
Conestoga Brand Superphosphate 18%	(236)			19.78	18.00		
Conestoga Brand Superphosphate 18%	(234)			20.40	18.00		
Conestoga Brand Superphosphate 18%	(258)			19.66	18.00		
LEBANON FERTILIZER WORKS Lahanon, Pa.							
Lavan's Superphosphate 18%	(117)			18.94	18.00		
Leven's Superphosphate 20%	(122)			20.98	20.00		
FRED E. LORD, INC. Esby, Pa.							
Lord's Superphosphate 20%	(142)			20.68	20.00		
MILLER CHEMICAL & FERTILIZER CORP. Baltimore, Md.							
Rich Yield Superphosphate 20%	(3)			22.12	20.00		
Rich Yield Superphosphate 20%	(192)			21.58	20.00		
COOPERATIVE FERTILIZER SERVICE Richmond, Va.							
C. F. S. Superphosphate 20%	(172)			21.44	20.00		
C. F. S. Superphosphate 20%	(208)			21.20	20.00		
C. F. S. Superphosphate 20%	(452)			21.98	20.00		
READING BONE FERTILIZER CO. Reading, Pa.							
Reading Superphosphate 20%	(203)			21.58	20.00		
Reading Superphosphate 20%	(251)			21.08	20.00		
F. S. ROYSTER GUANO CO. Baltimore, Md.							
Roysters 18% Superphosphate	(202)			21.00	18.00		
Roysters 20% Superphosphate	(40)			22.00	20.00		
Roysters 20% Superphosphate	(98)			20.22	20.00		
Roysters 20% Superphosphate	(372)			21.52	20.00		
Roysters 20% Superphosphate	(479)			21.68	20.00		
RUHM PHOSPHATE & CHEMICAL CO. Mt. Pleasant, Tenn.							
Ruhm's Phosphate Rock 30%	(80)			30.00	30.00		
*Deficient							

TABLE V. SUPERPHOSPHATE AND LIME PHOSPHATE FERTILIZERS—FURNISHING PHOSPHORIC ACID

MANUFACTURER AND BRAND NAME	PHOSPHORIC ACID					
	Total		Available		Insoluble	
	Found P. ct.	Guar. P. ct.	Found P. ct.	Guar. P. ct.	Found P. ct.	Guar. P. ct.
STANDARD WHOLESALE PHOSPHATE & ACID WORKS, INC. Baltimore, Md.						
Standard 20% Superphosphate (191)			21.78	20.00		
SWACK FERTILIZER COMPANY DuBois, Pa.						
Swack's Superphosphate 20% (413)			23.08	20.00		
SWIFT & COMPANY FERTILIZER WORKS Baltimore, Md.						
Swift's Red Steer Superphosphate 20% (18)			22.10	20.00		
Swift's Red Steer Superphosphate 20% (286)			21.46	20.00		
Swift's Red Steer Superphosphate 20% (448)			21.66	20.00		
I. P. THOMAS & SON COMPANY Camden, N. J.						
20% Superphosphate (260)			23.76	20.00		
20% Superphosphate (465)			21.42	20.00		
F. W. TUNNELL & CO., INC. Philadelphia, Pa.						
Tunnell's 20% Superphosphate (399)			22.24	20.00		
VIRGINIA-CAROLINA CHEMICAL CORPORATION Baltimore, Md.						
V-C 18% Superphosphate (46)			20.30	18.00		
V-C 18% Superphosphate (137)			20.08	18.00		
V-C 20% Superphosphate (106)			21.62	20.00		
V-C 20% Superphosphate (308)			22.78	20.00		
V-C 20% Superphosphate (371)			22.02	20.00		
V-C 20% Superphosphate (432)			21.64	20.00		
YORK CHEMICAL WORKS York, Pa.						
Dempwolfs' Superphosphate 20% (419)			21.68	20.00		
YORK STONE & SUPPLY COMPANY York, Pa.						
Cremer's York 20% Superphosphate (20)			21.42	20.00		
Average			21.77	----		
*Deficient						

TABLE VI. ROCK AND POTASH FERTILIZERS—FURNISHING PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME		AVAILABLE PHOSPHORIC ACID		POTASH		
		Found	Guar.	Found	Guar.	As Muriate
		P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
THE ACME GUANO COMPANY Baltimore, Md.						
Acme	0-14-7 (213)	15.60	14.00	7.79	7.00	---
THE AMERICAN AGRICULTURAL CHEMICAL CO. New York, N. Y.						
AA XXX Mixture	0-12-12 (303)	13.40	12.00	13.04	12.00	---
AA XXX Mixture	0-12-12 (428)	13.62	12.00	12.44	12.00	---
AA Chlaptain Mixture	0-14-7 (88)	14.44	14.00	7.97	7.00	---
Agrico Alkaline	0-12-12 (326)	12.70	12.00	13.01	12.00	---
Agrico Alkaline	0-12-12 (268)	13.68	12.00	11.87	12.00	---
Agrico Alkaline	0-14-7 (30)	15.06	14.00	7.45	7.00	---
Agrico Alkaline	0-14-7 (164)	14.34	14.00	8.27	7.00	---
Agrico Alkaline	0-14-7 (269)	17.08	14.00	7.72	7.00	---
Agrico Alkaline	0-14-7 (344)	15.52	14.00	7.73	7.00	---
Agrico Alkaline	0-14-7 (379)	15.14	14.00	7.47	7.00	---
ARMOUR FERTILIZER WORKS Baltimore, Md.						
Armour's Big Crop Fertilizer	0-14-7 (35)	14.62	14.00	7.59	7.00	---
Armour's Big Crop Fertilizer	0-14-7 (82)	14.52	14.00	7.16	7.00	---
Armour's Big Crop Fertilizer	0-14-7 (149)	15.86	14.00	7.44	7.00	---
Armour's Big Crop Fertilizer	0-14-7 (220)	15.40	14.00	7.30	7.00	---
Armour's Big Crop Fertilizer	0-14-7 (472)	15.36	14.00	6.99	7.00	---
BAUGH & SONS COMPANY Philadelphia, Pa.						
Baugh's Phosphate & Potash Mixture	0-14-7 (108)	15.20	14.00	7.65	7.00	---
Baugh's Phosphate & Potash Mixture	0-14-7 (305)	14.88	14.00	7.62	7.00	---
Baugh's Phosphate & Potash Mixture	0-14-7 (391)	14.56	14.00	7.54	7.00	---
Baugh's Phosphate & Potash Mixture	0-14-7 (469)	15.68	14.00	6.91	7.00	---
CARLISLE FERTILIZER WORKS Carlisle, Pa.						
Carlisle Brand Fertilizer	0-14-7 (134)	16.32	14.00	8.15	7.00	---
CENTRAL CHEMICAL CORP. Ragerstown, Md.						
Fermrite Fertilizer	0-12-12 (56)	12.77	12.00	12.34	12.00	---
Fermrite Potash Special	0-14-7 (126)	15.78	14.00	7.70	7.00	---
Fermrite Potash Special	0-14-7 (153)	16.30	14.00	8.31	7.00	---
Fermrite Potash Special	0-14-7 (169)	13.86	14.00	11.64	7.00	---
C. V. COOPERATIVE ASSN. Shippensburg, Pa.						
Old Reliable Fertilizer	0-14-7 (216)	13.82	14.00	13.90	7.00	---
THE DAVISON CHEMICAL CORPORATION Baltimore, Md.						
Devco Granulated Fertilizer	0-12-12 (283)	12.10	12.00	13.02	12.00	---
Devco Granulated Fertilizer	0-14-7 (328)	15.02	14.00	8.36	7.00	---
Devco Granulated Fertilizer	0-14-7 (11)	15.24	14.00	6.80	7.00	---
Devco Granulated Fertilizer	0-14-7 (190)	16.36	14.00	7.47	7.00	---
Devco Granulated Fertilizer	0-14-7 (198)	13.92	14.00	7.43	7.00	---
Devco Granulated Fertilizer	0-14-7 (282)	16.32	14.00	7.53	7.00	---
EASTERN STATES FARMERS' EXCHANGE West Springfield, Mass.						
Eastern States	0-14-14 (363)	14.90	14.00	16.01	14.00	---
Eastern States	0-16-8 (180)	17.30	16.00	9.65	8.00	---
Eastern States	0-16-8 (314)	17.94	16.00	10.31	8.00	---
Eastern States	0-16-8 (422)	16.04	16.00	8.96	8.00	---
Eastern States	0-20-20 (313)	21.84	20.00	21.60	20.00	---
Eastern States	0-24-12 (312)	24.90	24.00	13.06	12.00	---
FARMERS FERTILIZER WORKS Elizabethtown, Pa.						
Farmers	0-14-7 (246)	15.04	14.00	*6.51	7.00	---
GRIFFITH & BOYD COMPANY Baltimore, Md.						
Superphosphate & Potash	0-12-12 (54)	12.59	12.00	12.32	12.00	---
Special Grain Grower	0-14-7 (357)	14.16	14.00	7.47	7.00	---
Special Grain Grower	0-14-7 (438)	15.06	14.00	7.61	7.00	---
INDEPENDENT MANUFACTURING COMPANY Philadelphia, Pa.						
Independent Consumer	0-12-12 (405)	14.22	12.00	12.96	12.00	---
LANCASTER BONE FERTILIZER CO., INC. Oxford, Pa.						
Conestoga Brand	0-14-7 (233)	16.84	14.00	7.38	7.00	---
*Deficient						

TABLE VI. ROCK AND POTASH FERTILIZERS—FURNISHING PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME		AVAILABLE PHOSPHORIC ACID		POTASH		
		Found	Guar.	Found	Guar.	As Muriate
		P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
Conestoga Brand	0-14-7 (239)	16.78	14.00	*6.32	7.00	---
Conestoga Brand	0-14-7 (257)	14.78	14.00	7.83	7.00	---
LEBANON FERTILIZER WORKS Lebanon, Pa.						
Leven's	0-14-7 (120)	14.36	14.00	7.93	7.00	---
FRED E. LORD, INC. Espy, Pa.						
Lord's	0-14-7 (139)	15.80	14.00	7.07	7.00	---
MILLER CHEMICAL & FERTILIZER CORP. Baltimore, Md.						
Rich Yield Fertilizer	0-14-7 (2)	14.70	14.00	7.33	7.00	---
PENNSYLVANIA FARM BUREAU COOPERATIVE ASSN. Harrisburg, Pa.						
C. F. S.	0-14-7 (210)	15.54	14.00	7.09	7.00	---
C. F. S.	0-14-7 (277)	16.14	14.00	7.94	7.00	---
C. F. S.	0-14-7 (449)	15.48	14.00	7.07	7.00	---
READING BONE & FERTILIZER CO. Reading, Pa.						
Reading Fertilizer	0-14-7 (204)	16.58	14.00	*6.67	7.00	---
Reading Fertilizer	0-14-7 (250)	14.80	14.00	6.91	7.00	---
ROBERT A. REICHERD, INC. Allentown, Pa.						
Reicherd's Famous	0-14-7 (271)	16.76	14.00	*5.60	7.00	---
F. S. ROYSTER GUANO COMPANY Baltimore, Md.						
Royster Phosphate & Potash	0-14-7 (41)	15.32	14.00	7.13	7.00	---
Royster Phosphate & Potash	0-14-7 (99)	14.74	14.00	7.53	7.00	---
Royster Phosphate & Potash	0-14-7 (301)	15.38	14.00	6.81	7.00	---
SEIBERTS FERTILIZER Myerstown, Pa.						
Seiberts Fertilizer	0-14-7 (116)	15.22	14.00	6.89	7.00	---
M. L. SHOEMAKER CO. Philadelphia, Pa.						
Swift Sure	0-12-12 (411)	14.90	12.00	13.23	12.00	---
Swift Sure	0-14-7 (410)	15.76	14.00	7.74	7.00	---
SMITH AGRICULTURAL CHEMICAL CO. Columbus, Ohio						
Sacco	0-14-7 (457)	15.02	14.00	6.80	7.00	---
SOMERSET COUNTY FERTILIZER WORKS, INC. Somerset, Pa.						
Beaver Brand	0-14-7 (388)	15.02	14.00	7.70	7.00	---
STANDARD WHOLESALE PHOSPHATE & ACID WORKS Baltimore, Md.						
Standard Fertilizer	0-14-7 (219)	15.70	14.00	7.60	7.00	---
SWACK FERTILIZER COMPANY DuBois, Pa.						
Swack's	0-14-7 (417)	14.34	14.00	7.00	7.00	---
SWIFT & COMPANY FERTILIZER WORKS Baltimore, Md.						
Swift's Red Steer	0-12-12 (287)	12.36	12.00	12.22	12.00	---
Swift's Red Steer	0-14-7 (14)	15.08	14.00	6.82	7.00	---
Swift's Red Steer	0-14-7 (103)	14.12	14.00	8.04	7.00	---
Swift's Red Steer	0-14-7 (284)	15.26	14.00	8.25	7.00	---
F. W. TUNNELL & COMPANY INC. Philadelphia, Pa.						
Tunnell's Fertilizer	0-12-12 (321)	11.98	12.00	*11.40	12.00	---
Tunnell's Fertilizer	0-12-12 (400)	12.18	12.00	12.38	12.00	---
Tunnell's Fertilizer	0-14-7 (397)	14.82	14.00	7.67	7.00	---
VIRGINIA-CAROLINA CHEMICAL CORP. Baltimore, Md.						
V-C Fertilizer	0-12-12 (51)	12.93	12.00	12.66	12.00	---
V-C Fertilizer	0-14-7 (49)	15.26	14.00	8.23	7.00	---
V-C Fertilizer	0-14-7 (107)	15.04	14.00	7.36	7.00	---
V-C Fertilizer	0-14-7 (127)	15.60	14.00	7.67	7.00	---
V-C Fertilizer	0-14-7 (302)	15.40	14.00	7.97	7.00	---
V-C Fertilizer	0-14-7 (431)	15.40	14.00	7.50	7.00	---
V-C Fertilizer	0-14-7 (462)	15.22	14.00	7.53	7.00	---
*Deficient						

TABLE VII. MISCELLANEOUS FERTILIZERS

MANUFACTURER AND BRAND NAME	NITROGEN			PHOSPHORIC ACID						POTASH		
	Found	P. ct.	Guar.	Total		Available		Insoluble		Found	Guar.	As Murate P. ct.
				Found	P. ct.	Found	P. ct.	Found	P. ct.			
NITRATE OF SODA CHILEAN NITRATE SALES CORPORATION New York, N. Y.	(337)	15.93	16.00	----	----	----	----	----	----	----	----	----
Champion Chilean Nitrate of Soda												
THE SOLVAY PROCESS COMPANY Hopewell, Va.	(63)	16.74	16.00	----	----	----	----	----	----	----	----	----
Araditen the American Nitrate of Soda												
CYANAMID AMERICAN CYANAMID COMPANY New York, N. Y.	(336)	20.95	21.00	----	----	----	----	----	----	----	----	----
Aero Cyanamid Granular												
MISCELLANEOUS THE SEVERAGE COMMISSION Milwaukee, Wis.	(247)	6.50	6.00	----	----	3.94	2.00	----	----	----	----	----
Milorganite												

*Deficient